EMT-2350: PARAMEDIC THEORY III

Cuyahoga Community College

Viewing: EMT-2350 : Paramedic Theory III

Board of Trustees:
2018-01-25

Academic Term:
Fall 2020

Subject Code
EMT - Emergency Medical Technology

Course Number:
2350

Title:
Paramedic Theory III

Catalog Description:
Principles and practices of emergency medical technician paramedics based on the Department of Transportation National Standard Paramedic Curriculum, current to at least 2011, and the State of Ohio Paramedic Curriculum effective 2012. Includes anatomy and physiology of the pulmonary system, assessment and treatment of pulmonary emergencies, anatomy and physiology of cardiovascular system, assessment of cardiac and strok patient, EKG interpretation, cardiac and stroke treatment modalities, cardiac treatment pharmacology, defibrillation, and advanced cardiac life support.

Credit Hour(s):
6

Lecture Hour(s):
4

Lab Hour(s):
3

Other Hour(s):
112

Other Hour Details:
Directed Practice: 112 hours per semester
Prerequisite(s): EMT-2330 Paramedic Theory I, and departmental approval: Ohio EMT-B certification

Outcomes

Course Outcome(s):
Identify the signs and symptoms of pulmonary emergencies including: Chronic Obstructive Pulmonary Disease (COPD), emphysema, asthma, bronchitis, pneumonia, Respiratory Syncytial Virus (RSV) and determine and apply the appropriate therapeutic modalities for the pulmonary patient.

Objective(s):
1. Describe the anatomy and physiology of the pulmonary system.
2. Perform pulmonary assessment.
3. Explain pathophysiology of the pulmonary system.
4. Demonstrate appropriate treatment of the emergency patient with pulmonary disease.
5. Manage the patient in special pulmonary situations.
6. Identify drugs appropriate to treatment of pulmonary patients.

Course Outcome(s):
Identify the signs and symptoms of cardiovascular emergencies including: aneurysm, shock, rupture, heart failure, hypertension, hypotension, trauma, and sudden death in the cardiovascular patient; determine and apply the appropriate therapeutic modalities for the cardiovascular patient.

Objective(s):

1. Explain pathophysiology of the cardiovascular system.
2. Demonstrate appropriate treatment of the emergency patient with cardiovascular disease.
3. Manage the patient in special resuscitation situations.
4. Interpret of EKG's including 12 lead.
5. Perform mega codes on mannequins at Advanced Cardiac Life Support (ACLS) standards.
6. Identify drugs appropriate to the treatment of cardiovascular patients.
7. Demonstrate correct defibrillation, cardioversion, pacing and CPR techniques.
8. Demonstrate required paramedic-level performance standards in the clinical setting.
9. Describe physiology of the cardiovascular system.
10. Perform cardiac patient assessment.
11. Explain pathophysiology of the cardiovascular system.

Course Outcome(s):

Identify the signs and symptoms of neurovascular emergencies including: Transient Ischemic Attack (TIA) and stroke; determine and apply the appropriate therapeutic modalities for the cerebral neurovascular patient.

Objective(s):

1. Describe the anatomy and physiology of the central nervous system.
2. Perform stroke patient assessment.
3. Explain the pathophysiology of the central nervous system.
4. Demonstrate appropriate treatment of the emergency patient with an evolving Cerebral Vascular Accident (CVA).

Methods of Evaluation:

1. Examinations, quizzes, homework evaluation
2. Practical skill evaluations to Current National Curriculum and National Registry standards
3. American Heart Association Advanced Cardiac Life Support Exam standards
4. Clinical performance
5. Comprehensive exam with review covering Paramedic Theory I and Paramedic Theory III material

Course Content Outline:

1. Concepts
    a. Anatomy and physiology of cardiovascular system
    b. Pathophysiology of cardiovascular problems
    c. Diseases of coronary arteries.
    d. Symptoms and treatment modalities for:
        i. Congestive heart failure, pulmonary edema
        ii. Cardiac rupture, aneurysms
        iii. Cardiogenic shock
        iv. Cardiac arrest
        v. Hypotension
        vi. Dysrhytmia
        vii. stroke
    e. Identification of cardiac drugs and how/when to use them
2. Skills
    a. Patient assessment
    b. Management of pulmonary emergencies
    c. Management of cardiovascular problems and emergencies
    d. Reading normal EKG"s
    e. Lead placement, 12 lead EKG assessment
    f. Dysrhythmia recognition and treatment modalities
    g. Administering appropriate Cardiac drugs
    h. Cardioversion, defibrillation, pacing
3. Issues
    a. Universal precautions
    b. Scope of practice

c. Death and dying
d. Interacting and communicating with a diverse population

Resources

Walraven, Gail. *Basic Arrhythmias.* 8th. Upper Saddle River, NJ: Pearson, 2016.

Bledsoe, Bryan E, and Robert S. Porter. *Paramedic Care: Principles Practice.* 5th ed. Upper Saddle River, NJ: Prentice-Hall, 2017.

Bledsoe, Bryan E. *Essentials of A P for Emergency Care.* 11th ed. Upper Saddle River, NJ: Prentice-Hall, 2014.

American Heart Association. *ACLS Provider Manual.* 2015.

American Heart Association. *AHA - Advanced Cardiac Life Support Provider Manual - 2015.* {ts '2016-06-28 00:00:00'}.

"ACLS Preparatory Course Training Productions"

"American Safety"

Eichelberger, Martin R. "Brady Pediatric Emergencies: A Manual for Prehospital Care Providers, 2nd ed."

Instructional Services

CTAN Number:
Career Technical Assurance Guide CTEMS004 (4 of 6 courses, all must be taken)

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